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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,900	09/15/2000	Takahiro Okamoto	Q58055	2387

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EXAMINER

NGUYEN, MADELEINE ANH VINH

ART UNIT PAPER NUMBER

2626

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/662,900

Applicant(s)

OKAMOTO, TAKAHIRO

Examiner

Madeleine AV Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
4a) Of the above claim(s) 4 and 5 is/are withdrawn from consideration.
5) ☒ Claim(s) 9-11 is/are allowed.
6) ☒ Claim(s) 1-3 and 6-8 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 15 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/07/00; 3/14/03

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of group I (claims 1, 2, 3, 6, 7, 8, and 9-11) in the reply filed on October 20, 2004 is acknowledged.
2. Claims 4-5 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group II, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on October 20, 2004.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1- 3, 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Decker et al (US Patent No. 6,137,594).

Concerning claim 6, Decker et al discloses an apparatus for converting device-dependent image signals (RGB) into image signals (external CMYK) comprising an input converter for converting device-dependent image (RGB) signals into image signals (CMYK).

Decker fails to teach that the external CMYK signals are device-independent signals. However, Decker teaches that "Any color combination (e.g., CMYK) that is specified as having certain color values (e.g., L*a*b* values) which do not take into consideration the characteristics

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of the colors of the printer that is to perform the printing, is referred to herein as being externally defined (col. 5, line 48 – col. 6, line 10). Thus, the external CMYK signals are independent of the characteristics of the colors of the printer. It would have been obvious to one skilled in the art at the time the invention was made to consider the external CMYK signals are device-independent signals since they are externally defined and not dependent to the type of color printer (col. 6, lines 32-52).

Decker does not directly teach that the device-independent image signals representing densities with block dyes. However, Decker teaches that for an input file defined in CMY, the conversion to C'M'Y'K' is assumed that the ink are a perfect dye such that a mixture in equal amounts of CMY will produce black or a perfect gray, i.e., a block dye (col. 4, lines 55-58). For the conversion to L*a*b* to CMYK, Decker teaches the step of creating CMY patches measuring for L*a*b* values to get a CMY value for a given L*a*b* input value. Then the above process for converting CMY to CMYK can be used wherein the well-known simple scheme described above is based on the ideal dyes known as black dyes which yields perfect black or grey (w/o hue) whenever equal amounts from C, M, and Y are overprinted over a given area (col. 5, lines 10-38). Furthermore, Decker teaches the conversion with different variations for block dye and non-ideal dyes (col. 12, lines 1-7). It would have been obvious to one skilled in the art at the time the invention was made to consider that the device-independent image signals CMYK representing densities with block dyes since Decker assumes that for the conversion, the inks are a perfect dye such that a mixture in equal amounts of CMY will produce black or perfect gray, i.e., a block dye which is well known in the prior art.

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Concerning claim 7, Decker discloses an apparatus as discussed in claim 6 above.

Decker further teaches an output converter for converting the device-independent images signals (externally defined CMYK signals) into device-dependent image signals (CMYK signals for printer directly) for an output device (printer in Fig.4).

Concerning claim 8, Decker further teaches that the device-dependent image signals comprise R, G, B signals or C, M, Y signals, and the device-independent image signals comprise C, M, Y signals (col. 5, lines 10-47).

Claims 1-3 are method claims of apparatus claims 6-8. Claims 1-3 are rejected for the same rationales set forth for claims 6-8 respectively.

Allowable Subject Matter

The following is an Examiner's statement of reasons for the indication of allowable subject matter:

1. Claims 9-11 are allowable.
2. The following is an Examiner's Statement of Reasons for Allowance: Claims 9-11 are allowable over the prior art of record because the Examiner found neither prior art cited in its entirety, nor based on the prior art, found any motivation to combine any of the said prior art which teaches an apparatus for converting device-dependent image signals into device-independent image signals comprising a table selector for selecting one of a plurality of one-dimensional conversion tables which is optimum for an input device which reads an image subject with respective predetermined functions and input converter for converting the device-

dependent image signals processed by the selected one-dimensional conversion table into device-independent image signals representing densities with block dyes.

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

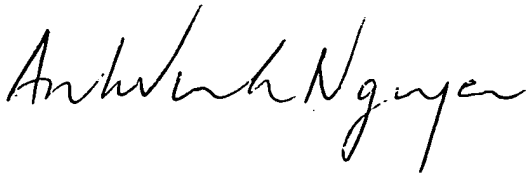
Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Takahashi et al (US Patent No. 5,579,132) discloses an image processing system and method for faithfully reproducing colors of object from negative film.
 - b. Decker et al (US Patent No. 6,061,501) teaches a system for determining a unique combination of four colorants (C'M'Y'K') of a given printer that is equivalent to an externally defined four colorant combination (CMYK) by having the same color values (e.g., L*a*b* values).
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine AV Nguyen whose telephone number is 703 305-4860. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A Williams can be reached on 703 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Anh Vinh Nguyen". The signature is written in a cursive, flowing style.

Madeleine AV Nguyen
Primary Examiner
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February 22, 2005